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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,440	11/07/2003	Fumito Nariyuki	FS-F03211-01	9406
37398	7590	02/06/2006	EXAMINER	
TAIYO CORPORATION 401 HOLLAND LANE #407 ALEXANDRIA, VA 22314			CHEA, THORL	
		ART UNIT	PAPER NUMBER	
		1752		

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/702,440	NARIYUKI, FUMITO
Examiner	Art Unit	
Thori Chea	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 28 November 2005.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1, 7-10, 13-14, 16-20 are is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1,3,7-10,13,14 and 16-20 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_ .

## **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 28, 2005 has been entered.
2. The objection to the drawings is withdrawn since the worker of ordinary skill in the art would have understood that the silver halide emulsion having high absorption in the uv region.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 7-9, 13, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination EP 1220026 (EP'026), Uytterhoeven et al (US Patent No. 6,143,488) and Daubendiek (US 4,672,026).

EP'026 discloses a photothermographic material having a photosensitive silver halide, a reducing agent for silver ion, a binder and a non-photosensitive organic silver salt. See the non-photosensitive organic silver salt has silver behenate from 90 to 100 mole % page 46, claims 3-5 ; silver halide preferably has a small grain size so as to reduce the white turbidness after formation of an image; the size of the silver halide grains is from 20 nm to 120 nm on page 16, [0094]; the halogen composition of the photosensitive silver halide is not particular limited , and

among these include preferred silver bromide and silver iodobromide are preferred [page 16 paragraph 0092]; the amount of the photosensitive silver halide, in term of coated silver amount per m<sup>2</sup> of the photosensitive material is from 0.03 to 0.6 g/m<sup>2</sup> on page 18, [0114]; the bisphenol reducing agent in on pages 8-9, [0060]; the silver halide and the organic silver salt which are preferred individually on page 18, paragraph [0115] and page 37, paragraphs [0243] to [0244]; the organic polyhalogen compound on pages 20-21, [0141] to [0145]; the hydrogen bonding compound on page 14,[0088]; and the toning agent and the ultrahigh contrast-providing agent known as development accelerator on pages 23, [0151] to [0151].

Uytterhoeven et al discloses the use of silver halide having silver iodide content at least 80 mole % and the silver iodide includes silver iodide including the alpha, beta and gamma phase to provide a photothermographic material with improved post-processing stability. See column 6, lines 7-27. Daubendiek (US 4,672,026) discloses the silver iodide in gamma and beta forms and having an absorption in the blue spectrum, which is with wavelength of 400 nm to 500 nm (column 2, lines 31-47), column 10, lines 11-17 and column 11, Table 1.

EP'026 fails to specifically disclose the photosensitive material containing 90 to 100 mole % having gamma phase ratio of 5 mole % to 90 mole % presented in the claimed invention. However, Uytterhoeven et al discloses the advantage of the use of silver halide having iodide content at least 90 mole % among the silver halide include silver halide having gamma phase, and Daubendiek (US 4,672,026) discloses that silver iodide having gamma phase at 28 mole % has been known and absorbs light in the blue spectrum. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the silver halide containing silver iodide including that having gamma phase taught in Uytterhoeven et al

or Daubiendiek to provide a the photothermographic material taught in EP'026 with improved post-stability and having sensitivity in the blue spectrum of the electromagnetic wavelength, and thereby provide a material as claimed.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination EP 1220026 (EP'026), Uytterhoeven et al (US Patent No. 6,143,488) and Daubendiek (US 4,672,026) as applied to claims 1, 7-9, 13, 17-18 above, and further in view of Tsuzuki (US Patent No. 5,677,121). Tsuzuki discloses silver salt of an organic acid comprises silver salt of behenic acid not less than 35 mole % to 90 mole % to provide a heat-developable material that has excellent graininess and highly definite image. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the silver salt of an organic acid within the scope taught in Tsuzuki in the material taught in EP'026 with a reasonable expectation of providing to provide a heat-developable material which has excellent graininess and highly definite image, and thereby provide a material as claimed.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination EP 1220026 (EP'026), Uytterhoeven et al (US Patent No. 6,143,488) and Daubendiek (US 4,672,026) as applied to claims 1, 7-9, 13, 17-18 above, and further in view of Goto et al (US Patent No. 6,787,298) or Farid et al (US Patent No. 5,747,235). EP'026 may not discloses a compound in which a one-electron oxidant formed by one-electron oxidation can release one or more electron in claim 14, but this compound has been known in Goto et al and Farid. See compound of Goto et al in columns 2-4, and Farid in the abstract and columns 16-18. The compound having property as claimed and useful as sensitizer for silver halide emulsion. It would have been obvious to the worker of ordinary skill in the art at the time the invention was

made to use the sensitizer taught in Goto et al or Farid et al in the material of EP'026 for same reason, and thereby provide a material as claimed.

7. Claims 10, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination EP 1220026 (EP'026), Uytterhoeven et al (US Patent No. 6,143,488) and Daubendiek (US 4,672,026) as applied to claims 1, 7-9, 13, 17-18 above, and further in view of Toya et al (5,998,126). EP'026 may not disclose the process of exposing the photothermographic material using a semiconductor laser having emission peak intensity at a wavelength of from 350 nm to 450 nm as a light source, but Toya et al in column 2, lines 1-12 discloses the use of laser source that produce laser having appropriate wavelength of exposure from 300 nm to 700 nm. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to select light source accordingly to the sensitivity to the image forming material including the laser taught in Toya et al, and thereby provide a process as claimed.

#### ***Double Patenting***

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1, 7-10, 13, 16-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim of copending Application No. 10/374,046 (US 2003/0194667A1) Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of the invention claimed in the copending application wholly encompasses the scope of the claimed invention, and the claims are direction to the silver iodide having overlapped gamma ratio.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Response to Arguments***

10. Applicant's arguments filed November 28, 2005 have been fully considered but they are not persuasive because of the reason set forth in the rejection above. The material claimed in the present claimed invention and that taught in EP'026 are substantially similar, except the content of silver iodide content having phase of 5 mole % to 90 mole %. However, the silver iodide having gamma phase and beta phase have been known as equivalent in Uytterhoeven et al or the combination thereof has been known in Daubendiek. The worker of ordinary skill in the art at the time the invention was made would have used silver iodide having gamma phase or beta phase or the combination thereof with an expectation of achieving a material with post-stability and with an absorption in the blue spectrum of the electromagnetic wavelength. The material of EP'026 is preformed which is formed in a state where the non-photosensitive organic salt is not present similar to that present in the claims. The Declaration under 37 CFR 1.132 on December 5, 2005

fails to overcome the rejection above since it is not commensurate with the scope of the claimed invention. See the scope of claim 1 wherein the material contains silver halide grains having grain size from 5 nm to 40 nm; a non-photosensitive organic silver salt having silver behenate from 40 mole % to 99 %; silver halide having iodide from 90 mole % to 100 mole %; the coating amount of photosensitive silver halide in term of amount of silver from 0.005 g/m<sup>2</sup> to 0.05 g/m<sup>2</sup>, and the average gamma phase ratio of the photosensitive silver halide is from 5 mole % to 90 mole %. The samples presented in the Declaration under 37 CFR 1.132 is based on the Examples 1 of the specification except emulsions A and B. The samples contains a numerous additives that is not claimed in the present claimed invention such as a bisphenol reducing agent, development accelerator, color toning agent, phtalazine compound, and polyhalogen compound. Only the silver halide having grains size of 29 nm is shown in the samples while the range is from 5 nm to 40 nm; the amount of silver behenate form 40 mole % to 99 mole % is not shown therein. The reducing agent is the bisphenol compound which is preferred compound. The applicants are referred to the scope of the claimed invention and the scope of samples presented in the Declaration. The applicants fails to provide a clear explanation as to why the use of the additive in the comparative samples would not affect the property of the material as claimed. “(I)t is well settled that evidence presented to rebut a prima facie case of obviousness must be commensurate in scope with the claims to which its pertains and that such evidence which is more narrow in scope than the claimed subject matter is not sufficient to rebut a prima facie case. In re Dill, 604 F. 2d 1356, 1361, 202 USPQ 805, 808 (CCPA 1979).

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea *TUH*  
01-31-2006

*Thorl Chea*  
Thorl Chea  
Primary Examiner  
Art Unit 1752